



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
	10/813,294	03/30/2004	Robert Charatan	7103/410 (P1238)	4533		
	27879	27879 7590 02/24/2005			EXAMINER .		
		OLIS OFFICE 27879	MORGAN, EILEEN P				
	BRINKS HOFER GILSON & LIONE ONE INDIANA SOUARE, SUITE 1600			ART UNIT	PAPER NUMBER		
	INDIANAPO	LIS, IN 46204-2033		3723			

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)	_			
			94	CHARATAN, ROBERT				
	Office Action Summary	Examiner		Art Unit				
		Eileen P M	norgan l	3723				
	The MAILING DATE of this communic	ation appears on the	cover sheet with the c	orrespondence address				
Period fo	• •							
THE   - External after   - If the   - If NO   - Failure   - Any	ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIO maisons of time may be available under the provisions o SIX (6) MONTHS from the mailing date of this commu period for reply specified above is less than thirty (30) period for reply is specified above, the maximum state re to reply within the set or extended period for reply wereply received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b).	CATION.  f 37 CFR 1.136(a). In no evinication.  days, a reply within the statutory period will apply and will.  by statute, cause the apply.	ent, however, may a reply be timutory minimum of thirty (30) days Il expire SIX (6) MONTHS from lication to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication.  O (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed	on <u>03 December</u> 2	<u>004</u> .	•				
		o)⊠ This action is n						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits								
·	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	Claim(s) <u>1-21 and 32-41</u> is/are pendir	ng in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.								
5)□	5) Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-21, 32-41</u> is/are rejected.							
7)[	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restrict	on and/or election r	equirement.					
Applicati	on Papers							
9)[	The specification is objected to by the	Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to	by the Examiner. No	te the attached Office	Action or form PTO-152.				
Priority u	ınder 35 U.S.C. § 119							
12)	Acknowledgment is made of a claim for	or foreign priority un	der 35 U.S.C. § 119(a)	-(d) or (f).				
-	☐ All b)☐ Some * c)☐ None of:	<b>5</b> . ,	•					
- /.	1. Certified copies of the priority d	ocuments have bee	n received.					
	2. Certified copies of the priority d			on No				
	3. Copies of the certified copies o	f the priority docume	ents have been receive	d in this National Stage				
	application from the Internation	al Bureau (PCT Rul	e 17.2(a)).					
* 5	See the attached detailed Office action	for a list of the certi	fied copies not receive	d.				
Attachmen	t(s)							
	e of References Cited (PTO-892)	0.040)	4) Interview Summary Paper No(s)/Mail Da					
· <del></del>	e of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or P		5) Notice of Informal P.	atent Application (PTO-152)				
	r No(s)/Mail Date		6)					

Art Unit: 3723

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 depends on itself.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4-6,8-13,17,19,20, rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tung et al.-6,306,022.

Tung discloses a conditioning disk having diamond conditioning means and nozzles arranged within the conditioner to introduce a liquid, such as deionized water, between the pad and conditioning elements, wherein the conditioner is moved against pad to condition it.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 3723

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 7, 14,15, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tung, alone.

The shape of the conditioning surface would have been matter of obvious design choice dependent on machining parameters. In regard to the nozzles or cavities sitting within an aperture, the end opening or orifice of the cavity on the conditioning surface acts as a spout (nozzle) and is within its own aperture. To have a separate element (nozzle) attached with the aperture would be a matter of obvious design choice since both wok equally well and carry out the same function.

Claim 16,21,32-40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tung in view of Perlov et al.-6,648,740.

Tung does not disclose a rotary union. However, Perlov teaches a carrier head for polishing a wafer against a polishing pad. The carrier has fluid lines connected to a supply source for distributing within head. The carrier head is gimbaled and formed with a rotary union in order to rotate head and allow supply line and nozzles to rotate therewith. Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide Tung with a rotary union, as taught by Perlov, in order to allow more efficient conditioning and allow nozzles to rotate therewith.

# Allowable Subject Matter

Claim 41 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 3723

### Response to Arguments

Applicant's arguments filed 12-3-04 have been fully considered but they are not persuasive. In regard to arguments on page 8, drawn to the claimed 'nozzle', Webster's new World Dictionary (Third Edition 1988) defines a nozzle as 'a spout at the end of a pipe by which a stream of liquid may be directed.' A spout is defined as 'an orifice'. Therefore the 'cavity' is deemed a nozzle in its broadest sense, since element 36 is an orifice at the end of a pipe (elongate passage connecting surfaces 33 and 35). Trench 40 is a manifold since it has an inlet and several outlets (trenches 42 into cavities 36). Trench 40 indeed reads on the definition of 'liquid supply line'. In regard to claims 12-21, Tung discloses the conditioning head 'positionable proximate' a liquid supply nozzle as much as applicants instant invention does. The cavities are at the perimeter and postionable as broadly recited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P Morgan whose telephone number is 703.308.1743. The examiner can normally be reached on M-Th. Fridays - Work at Home. 2nd Monday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703.308.2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EM

February 22, 2005

EILEEN P. MORGAN PRIMARY EXAMINER